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GAAP: An Analytical Study of Financial Accounting Standards

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GAAP: AN ANALYTICAL STUDY OF FINANCIAL ACCOUNTING STANDARDS

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ABSTRACT
WILLIAM MAYO: GAAP: AN ANALYTICAL STUDY OF FINANCIAL ACCOUNTING STANDARDS

This thesis is comprised of a series of case studies covering various principles and standards of financial accounting. The thesis was created throughout a single academic year and the case studies are ordered to follow the basic elements of a balance sheet. These case studies include financial statement analysis, income and asset ratios, statement of cash flows, accounts receivable, revenue and inventory recognition, depreciation and fraud, GAAP standards compared to IFRS standards, debt, stockholders' equity, securities, revenue growth and regulatory issues, tax liabilities, and pensions and retirement plans. The purpose of this thesis format is to provide analysis for and within multiple areas of financial accounting.

Most of the cases studies begin with an overview of the main topic of the study, followed by questions to be analyzed and answered. These questions ranged from creating journal entries to comparing companies' financial performances. Many of the case studies involved a heavy usage of Excel for creating tables, financial statements, and comparisons. Usually, the case studies also contained an "analysis" section of questions, which left more space for user interpretation in the answers to be provided.

Because these case studies are based on established financial accounting standards, there are not necessarily any new findings. Rather, each case study is a reinforcement of individual accounting principles. The case studies confirm that there is a

necessity to the existence of these principles, and their usage is based on logical thought and established facts that have become commonplace in the field of financial accounting.

The thesis was also a tool to hone critical thinking and research skills. It allowed users to gain proficiency in Excel, among other technologies, such as the accounting codification website. It reinforced the basic concepts of theoretical accounting while allowing users to apply this knowledge to contextualized problems.

In summary, this thesis, as well as the corresponding class taught by Dr. Victoria Dickinson, was an extremely valuable experience for those of us entering the accounting world. We were able to strengthen our learning in other accounting courses because this class subjected us to different types of studies, analyses, and concepts.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES (CONTINUED 1)

CASE 1: FINANCIAL STATEMENT ANALYSIS

It can be difficult to search through the accounting records of these two similar companies and find many glaring differences. Many of the financial statements and ratios show very close comparisons. However, each company made a few different business decisions that shed light on which company is a smarter, safer, and more profitable investment.

Glenwood Heating, Inc. reports financial ratios that are better than Eads', but largely due to the fact that Glenwood reported a higher net income. At first glance, it may appear that Glenwood is the obvious choice to invest in, but further analysis into their business practices will scare away investors. The most alarming numbers come from their Statement of Cash Flows, where they lost $16,374 to operating activities and only had a cash balance of $426 at the end of the year. There is major uncertainty in regards to how Glenwood will continue to operate, especially due to the fact that next year they will have to fund another piece of important equipment that could cost upwards of $16,000. The owner of this piece of equipment refused to promise Glenwood the same price; therefore they could be in limbo if the price rises drastically.

Eads Heater, Inc. capitalizes in the areas that Glenwood fails in. The differences in the financial ratios are a product of Eads accounting decisions, not a reflection of their poor business values. They chose to sacrifice numbers in the first year of operations in order to solidify their ability to operate and profit in the future. In fact, Eads decision to

lease an important piece of equipment will prove vital to their continued operations as a company. It is also important to note that Eads collects cash from their inventory sales over a month faster than Glenwood is able to. Eads was almost able to break-even in operating activities and managed to end the year with a cash balance of $7,835. Eads is primed to perform well in the future, as they will be able to turn this cash into investments that will benefit their business.

Ultimately, Eads appears to be the better investment of the two, because of their decision to lease an important piece of equipment for multiple years, and because their cash balance will allow them to fund projects, investments, and perform research that will only increase the value of the company.

Net income is a critical number for potential investors to consider when deciding whether or not to invest in a specific company. Multiple accounting decisions led Glenwood to report a higher net income than Eads (over $20,000 difference). Both companies reported the same sales revenues, but Glenwood's use of FIFO allowed them to report a lower cost of goods sold, because the price of inventory rose throughout the year. Glenwood also estimated only one percent of receivables unable to be collected compared to five percent estimation from Eads. The biggest difference is obviously in the depreciation expense account. Eads' decision to use the double-declining method of depreciation and to lease a piece of equipment that Glenwood is renting caused their depreciation expense to be $22,500 higher than Glenwood's. While in the first year it appears that Glenwood is headed for a greater net income, their decision to rent the piece of equipment will likely come back to harm them in the future.

Both companies have the same activity in their equity accounts. They have 3,200 shares outstanding and paid $23,200 in dividends. Glenwood has a higher reported total stockholder's equity simply because they reported a higher net income.

Eads and Glenwood also share similar balance sheets. Eads reports higher total assets and liabilities largely due to the lease agreement they signed for a piece of equipment. This gives them an asset account of Leased equipment, and a liability account of Lease payable that Glenwood is not able to report because they chose to rent the equipment for a single year as opposed to signing a capital lease agreement.

This is the most important statement to analyze in the comparison of these two companies. In the first year, Eads lost only $325 to operating activities compared to Glenwood's massive loss of $16,374. Glenwood's cash balance at the end of the year is only $426 while Eads' is $7,835. This is important because Glenwood must be able to find cash to pay for the important piece of equipment that Eads has leased for eight years. If Glenwood is unable to find the cash to fund this equipment, the entire operation of the company could be at risk. Eads sacrificed in the short term, but is better suited to continue to operate in the next few years.

Glenwood Heating, Inc. Chart of Accounts						
Part A	**Cash**	**Accounts Receivable**	**Allowance for Bad Debts**	**Inventory**	**Land**	**Building**
A1	$160,000					
A2	$400,000					
A3	-$420,000				$70,000	$350,000
A4	-$80,000					
A5				$239,800		
A6		$398,500				
A7	$299,100	$299,100				
A8	-$213,360					
A9	-$41,000					
A10	-$34,200					
A11	-$23,200					
A12						
Totals	$47,340	$99,400	$0	$239,800	$70,000	$350,000
Part B						
B1			$994			
B2				-$177,000		
B3						
B4	-$16,000					
B5	-$30,914					
Totals	$426	$99,400	$994	$62,800	$70,000	$350,000

Table 1.1 Glenwood Chart of Accounts

Glenwood Heating, Inc. Chart of Accounts					
Part A	**Accumulated Depreciation-Building**	**Equipment**	**Accumulated Depreciation-Equipment**	**Leased Equipment**	**Accumulated Depreciation-Leased Equipment**
A1					
A2					
A3					
A4		$80,000			
A5					
A6					
A7					
A8					
A9					
A10					
A11					
A12					
Totals	$0	$80,000	$0	$0	$0
Part B					
B1					
B2					
B3	$10,000		$9,000		
B4					
B5					
Totals	$10,000	$80,000	$9,000	$0	$0

Table 1.1 (continued 1) Glenwood Chart of Accounts

Glenwood Heating, Inc. Chart of Accounts							
Part A	**Accounts Payable**	**Interest Payable**	**Notes Payable**	**Lease Payable**	**Common Stock**	**Retained Earnings**	**Dividends**
A1					$160,000		
A2			$400,000				
A3							
A4							
A5	$239,800						
A6							
A7							
A8	$213,360						
A9			$20,000				
A10							
A11							$23,200
A12		$6,650					
Totals	$26,440	$6,650	$380,000	$0	$160,000	$0	$23,200
Part B							
B1							
B2							
B3							
B4							
B5							
Totals	$26,440	$6,650	$380,000	$0	$160,000	$0	$23,200

Table 1.1 (continued 2) Glenwood Chart of Accounts

Glenwood Heating, Inc. Chart of Accounts						
Part A	**Sales**	**Cost of Goods Sold**	**Bad Debt Expense**	**Depreciation Expense**	**Interest Expense**	**Other Operating Expense**
A1						
A2						
A3						
A4						
A5						
A6	$398,500					
A7						
A8						
A9					$21,000	
A10						$34,200
A11						
A12					$6,650	
Totals	$398,500	$0	$0	$0	$27,650	$34,200
Part B						
B1			$994			
B2		$177,000				
B3				$19,000		
B4						
B5						
Totals	$398,500	$177,000	$994	$19,000	$27,650	$34,200

Table 1.1 (continued 3) Glenwood Chart of Accounts

Glenwood Heating, Inc. Chart of Accounts		
Part A	**Rent Expense**	**Provisions for Income Taxes**
A1		
A2		
A3		
A4		
A5		
A6		
A7		
A8		
A9		
A10		
A11		
A12		
Totals	$0	$0
Part B		
B1		
B2		
B3		
B4	$16,000	
B5		$34,914
Totals	$16,000	$34,914

Table 1.1 (continued 4) Glenwood Chart of Accounts

Glenwood Heating, Inc. Multistep Income Statement	
Sales Revenue	$398,500
Cost of Goods Sold	$177,000
Gross Profit	$221,500
Selling and Administrative Expenses	$70,194
Income from Operations	$151,306
Interest Expense	$27,650
Income before Taxes	$123,656
Income Tax	$30,914
Net Income	$92,742

Table 1.2 Glenwood Multistep Income Statement

Glenwood Heating, Inc. Statement of Retained Earnings	
Retained Earnings, January 1	$0
Add: Net Income	$92,742
	$92,742
Less: Dividends	-$23,200
Retained Earnings, December 31	$69,542

Table 1.3 Glenwood Statement of Retained Earnings

Glenwood Heating, Inc. Classified Balance Sheet		
Assets		
Current Assets		
Cash		$426
Accounts Receivable	$99,400	
Less: Allowance for doubtful accounts	$994	$98,406
Inventory		$62,800
Total Current Assets		$161,632
Property, Plant, Equipment		
Land		$70,000
Building	$350,000	
Less: Accumulated Depreciation- Building	$10,000	$340,000
Equipment	$80,000	
Less: Accumulated Depreciation- Equipment	$9,000	$71,000
Total Property, Plant, and Equipment		$481,000
Total Assets		$642,632
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts Payable		$26,440
Interest Payable		$6,650
Lease Payable		$0
Total Current Liabilities		$33,090
Long-Term Debt		
Twenty-year 7% Debentures, due September 30, 20X1		$380,000
Total Liabilities		$413,090
Stockholders' Equity		
Common Stock	$160,000	
Retained Earnings	$69,542	
Total Stockholders' Equity		$229,542
Total Liabilities and Equity		$642,632

Table 1.4 Glenwood Classified Balance Sheet

Glenwood Heating, Inc. **Statement of Cash Flows**		
Cash Flows from Operating Activities		
Net Income		$92,742
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:		
Depreciation Expense	$19,000	
Increase in Accounts Receivable	-$98,406	
Increase in Inventory	-$62,800	
Increase in Accounts Payable	$26,440	
Increase in Interest Payable	$6,650	
Net Cash Used by Operating Activities		$16,374
Cash Flows from Investing Activities		
Purchase of Equipment	-$80,000	
Purchase of Land	-$70,000	
Purchase of Building	-$350,000	
Net Cash Used by Investing Activities		$500,000
Cash Flows from Financing Activities		
Payment of Cash Dividends	-$23,200	
Issuance of Common Stock	$160,000	
Redemption of Bonds	-$380,000	
Net Cash Used by Financing Activities		$243,200
Net Decrease in Cash		$759,574

Table 1.5 Glenwood Statement of Cash Flows

Glenwood Heating, Inc. Financial Ratios	
Liquid Ratios	
Current Ratio	3.04
Acid-Test Ratio	1.88
Accounts Receivable Turnover	4.01
Days to Collect Receivables	91.02
Inventory Turnover	2.82
Days to Sell Inventory	129.43
Operating Cycle	219.55
Profitability Ratios	
Gross Profit Margin	56%
Profit Margins	23%
Return on Assets (ROA)	14%
Return on Owners' Equity (ROE)	40%
Earnings per Share (EPS)	28.98
Long-Term Solvency Ratios	
Debt Ratio	64%
Times Interest Earned	5.47

Table 1.6 Glenwood Financial Ratios

Eads Heaters, Inc. Chart of Accounts						
Part A	**Cash**	**Accounts Receivable**	**Allowance for Bad Debts**	**Inventory**	**Land**	**Building**
A1	$160,000					
A2	$400,000					
A3	-$420,000				$70,000	$350,000
A4	-$80,000					
A5				$239,800		
A6		$398,500				
A7	$299,100	-$299,100				
A8	-$213,360					
A9	-$41,000					
A10	-$34,200					
A11	-$23,200					
A12						
Totals	$47,340	$99,400	$0	$239,800	$70,000	$350,000
Part B						
B1			$4,970			
B2				-$188,800		
B3						
B4	-$16,000					
B5	-$23,505					
Totals	$7,835	$99,400	$4,970	$51,000	$70,000	$350,000

Table 1.7 Eads Chart of Accounts

Eads Heaters, Inc. Chart of Accounts					
Part A	**Accumulated Depreciation-Building**	**Equipment**	**Accumulated Depreciation-Equipment**	**Leased Equipment**	**Accumulated Depreciation-Leased Equipment**
A1					
A2					
A3					
A4		$80,000			
A5					
A6					
A7					
A8					
A9					
A10					
A11					
A12					
Totals	$0	$80,000	$0	$0	$0
Part B					
B1					
B2					
B3	$10,000		$20,000		
B4				$92,000	$11,500
B5					
Totals	$10,000	$80,000	$20,000	$92,000	$11,500

Table 1.7 (continued 1) Chart of Accounts

Eads Heaters, Inc. Chart of Accounts							
Part A	**Accounts Payable**	**Interest Payable**	**Notes Payable**	**Lease Payable**	**Common Stock**	**Retained Earnings**	**Dividends**
A1					$160,000		
A2			$400,000				
A3							
A4							
A5	$239,800						
A6							
A7							
A8	-$213,360						
A9			-$20,000				
A10							
A11							$23,200
A12		$6,650					
Totals	$26,440	$6,650	$380,000	$0	$160,000	$0	$23,200
Part B							
B1							
B2							
B3							
B4				$83,360			
B5							
Totals	$26,440	$6,650	$380,000	$83,360	$160,000	$0	$23,200

Table 1.7 (continued 2) Eads Chart of Accounts

Eads Heater, Inc. Chart of Accounts						
Part A	**Sales**	**Cost of Goods Sold**	**Bad Debt Expense**	**Depreciation Expense**	**Interest Expense**	**Other Operating Expense**
A1						
A2						
A3						
A4						
A5						
A6	$398,500					
A7						
A8						
A9					$21,000	
A10						$34,200
A11						
A12					$6,650	
Totals	$398,500	$0	$0	$0	$27,650	$34,200
Part B						
B1			$4,970			
B2		$188,800				
B3				$30,000		
B4				$11,500	$7,360	
B5						
Totals	$398,500	$188,800	$4,970	$41,500	$35,010	$34,200

Table 1.7 (continued 3) Eads Chart of Accounts

Eads Heater, Inc. Chart of Accounts		
Part A	**Rent Expense**	**Provisions for Income Taxes**
A1		
A2		
A3		
A4		
A5		
A6		
A7		
A8		
A9		
A10		
A11		
A12		
Totals	$0	$0
Part B		
B1		
B2		
B3		
B4		
B5		$23,505
Totals	$0	$23,505

Table 1.7 (continued 4) Eads Chart of Accounts

Eads Heaters, Inc. Multistep Income Statement	
Sales Revenue	$398,500
Cost of Goods Sold	$188,800
Gross Profit	$209,700
Selling and Administrative Expenses	$80,670
Income from Operations	$129,030
Interest Expense	$35,010
Income before Taxes	$94,020
Income Tax	$23,505
Net Income	$70,515

Table 1.8 Eads Multistep Income Statement

Eads Heaters, Inc. Statement of Retained Earnings	
Retained Earnings, January 1	$0
Add: Net Income	$70,515
	$70,515
Less: Dividends	$23,200
Retained Earnings, December 31	$47,315

Table 1.9 Eads Statement of Retained Earnings

Eads Heaters, Inc. Classified Balance Sheet		
Assets		
Current Assets		
Cash		$7,835
Accounts Receivable	$99,400	
Less: Allowance for Doubtful Accounts	$4,970	$94,430
Inventory		$51,000
Total current assets		$153,265
Property, Plant, Equipment		
Land		$70,000
Building	$350,000	
Less: Accumulated Depreciation- Building	$10,000	$340,000
Equipment	$80,000	
Less: Accumulated Depreciation- Equipment	$20,000	$60,000
Leased Equipment	$92,000	
Less: Accumulated Depreciation- Leased Equipment	$11,500	$80,500
Total Property, Plant, and Equipment		$550,500
Total Assets		$703,765
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts Payable		$26,440
Interest Payable		$6,650
Lease Payable		$83,360
Total Current Liabilities		$116,450
Long-Term Debt		
Twenty-year 7% Debentures, due September 30 20X1		$380,000
Total Liabilities		$496,450
Stockholders' Equity		
Common Stock	$160,000	
Retained Earnings	$47,315	
Total Stockholders' Equity		$207,315
Total Liabilities and Equity		$703,765

Table 1.10 Eads Classified Balance Sheet

Eads Heaters, Inc. Statement of Cash Flows		
Cash Flows from Operating Activities		
Net Income		$70,515
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:		
Depreciation Expense		$41,500
Increase in Accounts Receivable	-$94,430	
Increase in Inventory	-$51,000	
Increase in Accounts Payable	$26,440	
Increase in Interest Payable	$6,650	
Net Cash Used by Operating Activities		$325
Cash Flows From Investing Activities		
Purchase of Equipment	-$80,000	
Purchase of Land	-$70,000	
Purchase of Building	-$350,000	
Net Cash Used by Investing Activities		$500,000
Cash Flows from Financing Activities		
Payment of Cash Dividends	-$23,200	
Issuance of Common Stock	$160,000	
Lease payable	$83,360	
Redemption of Bonds	-$380,000	
Net Cash Used by Financing Activities		$159,840
Net Increase in Cash		$660,165

Table 1.11 Eads Statement of Cash Flows

Eads Heaters, Inc. Financial Ratios	
Liquid Ratios	
Current Ratio	2.48
Acid-Test Ratio	1.65
Accounts Receivable Turnover	4.22
Days to Collect Receivables	86.49
Inventory Turnover	3.70
Days to Sell Inventory	98.65
Operating Cycle	185.14
Profitability Ratios	
Gross Profit Margin	53%
Profit Margins	18%
Return on Assets (ROA)	10%
Return on Owners' Equity (ROE)	34%
Earnings per Share (EPS)	22.04
Long-Term Solvency Ratios	
Debt Ratio	71%
Times Interest Earned	3.69

Table 1.12 Eads Financial Ratios

CASE 2: INCOME AND ASSET RATIOS

Molson Coors is a brewing company that was established in 2005 after the merger of Adolph Coors Co. and Molson, Inc. Its largest markets are the United States, Canada, and the United Kingdom. Molson Coors aspires to appeal to a multitude of consumer tastes, styles, and price preferences. Although the production of quality beer is the staple of Molson Coors Brewing Co., they engage in a variety of business transactions that can make it difficult to find and understand the important information in their financial statements. This analysis will extract the useful information from Molson Coors financial statements and notes, especially as it relates to the future profitability and stock expectations of the company.

The main focus of this analysis deals with the core business aspects of Molson Coors, their operations. Operations have the greatest effect on the cash flows, which is important in predicting Molson Coors stock value in the future. Throughout this analysis, there are new calculation values for net operating assets, persistent income, and net operating income after tax. These calculations removed items from Molson Coors financial statements that are not recurring, operating items. These calculations also allow potential investors to gain insight of the "meat" of Molson Coors operations, and they provide better indicators of future operations, profitability, and future cash flows.

Molson Coors, like other public companies, is required by law to be taxed at a statutory tax rate. However, Molson Coors engages in a variety of foreign business operations that provide tax breaks. In an effort to find a persistent income for Molson

Coors, a new effective tax rate was calculated by averaging the separate tax items for each year and totaling the sum of those averages. Persistent income is an important measure for investors to use in future profitability predictions. Persistent income for Molson Coors removes nonrecurring, non-operating items from its income statement including discontinued operations, special items, and other income. All three of these are considered nonrecurring because they cannot be reasonably expected to occur in the future at predictable levels. These items are not valuable indicators of the core operations of Molson Coors, and therefore they are not valuable to any analysis of Molson Coors' future operations.

Arguably the most important step of our analysis was determining items from Molson Coors balance sheet that are non-operating. These items only cloud investors from the actual operations numbers. Non-operating assets such as affiliates, goodwill, other intangibles, and an investment in Miller Coors were all removed from the balance sheet simply because these assets do not provide any indication of Molson Coors actual operations. Liabilities including discontinued operations, debts, pension payments, and derivative hedging instruments were all removed from the opposite side of Molson Coors balance sheet for the same reason as stated above.

This calculation of net operating assets provides a critical figure in determining future operations predictions. After analysis (see appendix), it was confirmed that Molson Coors can be reasonably predicted to give investors a positive return.

Appendix

a. The major classifications on an income statement are: sales, gross profit, expenses (controllable and fixed), profit, and loss.

b. Classified income statements permit users to assess the amounts, timing and uncertainty of future cash flows. GAAP requires companies to submit classified income statements because its subsections can be more informative than a simple income statement.

c. Financial statement users would be interested in persistent income because it is the portion of a company's income that can be reasonably expected to reoccur the following year. Obviously, users want this measurement to determine future profitability of a company and to determine whether or not to invest.

d. Comprehensive income includes all changes in equity during a period except those resulting from an investment by an owner or a distribution to owners. Net income includes all changes in owner's equity.

e. *Net sales=Sales-Excise Taxes.* Excise taxes, which in this case are taxes on beer, inflate the total sales number. Molson Coors reports these items separately to show the effect of excise taxes on their total sales revenue.

f. i. Special items are unusual gains or expenses that a company believes are not indicative of its core operations. In Molson Coors' case, some of these items include:

- Expenses from restructuring employee severance programs
- Flood losses
- Asset impairment
- Termination fees

ii. Molson Coors reports these special items on a separate line because they are largely unpredictable. However, they are classified as operating expenses because these items have a great impact on the ability of Molson Coors to operate normally.

g. "Other income" related expenses and gains are unrelated to operations, whereas "special items" are nonrecurring operations-related items.

h. i. Comprehensive income totals $760.2 million for the year compared to $572.5 million in net income.

ii. The 188.3 million in additional income attributed to comprehensive income stems entirely from non-operating gains, such as foreign currency adjustments, pension adjustments, and unrealized gains.

i. There are 3 statements on Molson Coors' income statement that we considered non-persistent:

1. *Special Items*- they may still exist in the future, but the amounts of these items are undeterminable.

2. *Income/losses from discontinued operations*- discontinued operations will not persist in the future.

3. *Income/losses from non-controllable interests*- like special items, non-controllable interests may affect the company next year, but there is no accurate way to determine these amounts.

j. i. Molson Coors effective tax rate in 2013 is 12.8 percent. That is calculated as income tax expense (84) divided by pretax income (654.5).

Source:

ii. Unrecognized tax benefit, change in valuation allowance, and "other" taxes are unpredictable both in amount and existence for future years. We considered eliminating the unpredictable taxes from our effective tax rate but ultimately determined that eliminating these elements would probably result in an undervaluation of tax expenses for the company. Instead, we averaged the amounts of each item for each year (predictable and unpredictable) and summed the totals to create a new effective tax rate of 16.35 percent.

Note: Foreign tax law was not averaged because its 2012 total was not indicative of future rates due to a change in foreign policy that resulted in an abnormally high rate.

k. Our calculation of Molson Coors' persistent income can be found in the chart below. We used our effective tax rate calculated in j.) to tax these items. Also, we determined that discontinued operations, special items, and other income are all nonrecurring items, and therefore not necessary to calculate persistent income.

Molson Coors Income Statement	
Persistent Income	(in millions)
Sales	5999.6
Excise Tax	(1793.5)
Net Sales	**4206.1**
Cost of Goods Sold	(2545.6)
Gross Profit	**1660.5**
General and Admin Expenses	(1193.8)
Equity Income	539.0
Other Income	**1005.7**
Interest Expense	(183.8)
Interest Income	13.7
Income from cont. operations	**835.6**
Income Tax Expense	106.96
Net Income	**728.64**
Less: non-controlling interests	(5.2)
Net (persistent) income	**723.44**

Table 2.1 Molson Coors Income Statement

The persistent income figure is an average of NI from Continuing Operations from 2011 to 2013.

l.) i. We determined that special items, discontinued operations, and other income are all non-operating items, because their financial contributions to the income statement are not related to Molson Coors brewing operations.

ii. Note: Other income and special items are both listed at “before tax” on the income statement; for these items, we will apply the company’s three-year marginal tax rate of 12 percent. Discontinued operations are listed as “after tax” and remain the same as previously listed on the income statement.

Molson Coors **Comparison of Non-Operating Items for the Years 2012 and 2013**		
Non-operating Items	2013	2012
Special items, net	(200)	(81.4)
Equity income in MillerCoors	474.32	449.59
Other income (expense), net	18.9	(90.3)
Income from discontinued Operations	2	1.5
Income attributable to non-controlling interests	(4.576)	3.43
Total non-operating items	**$290.64**	**$282.82**

Table 2.2 Molson Coors Comparison of Non-Operating Items

iii. Net operating assets for 2013 and 2012 are respectively $13,042.80 and $13,728.20

Molson Coors **Comparison of Total Net Operating Assets for 2012 and 2013**		
Net Operating Assets	2013	2012
Total Assets	15,580.1	16,212.2
Affiliates	30.8	52.2
Investment in MillerCoors	2,506.5	2,431.8
Total net operating assets (in millions)	$13,042.80	$13,728.20

Table 2.3 Molson Coors Comparison of Net Operating Assets

m.) i.

Non-operating Assets:

1. *Investment in Miller Coors*- investment in another company may provide Molson Coors with cash, but it is not a part of operations.

2. *Affiliate*- like the investment in Miller Coors, affiliates provide return on investments but do not relate to operations.

3. *Goodwill & other intangibles*- intangible assets produce long-term value and may derive from operations in some cases; however, they are not essential to operations.

Non-operating liabilities:

1. *Hedging instruments*- hedging instruments are used for equity related purposes (bonds, stocks, etc.).

2. *Discontinued Operations*- discontinued operations will have no effect on the present and future operations of Molson Coors.

3. *Long-term debt*- the obligation to pay off long-term debt does not affect the operations of Molson Coors.

4. *Pension*- post-retirement payments, while important to employees, are

5. *Derivative Hedging*- see: *hedging instruments*

7. *Short & long-term debt*- see: *long-term debt*

n. *RNOA= Net Operating Profit After Tax/ Average Net Operating Assets*
2013:
874.36/1246.2= 70.2%
2012:
755.39/1576.9= 47.9%

o. *Operating Profit Margin= Net Operating Profit After Tax/Sales*
2013:
874.36/5999.6=14.6%
2012:
755.39/5615.0=13.5%

Net Operating Asset Turnover= Sales/Average Net Operating Assets
2013:
5999.6/1246.2= 4.8x
2012:
5615/1576.9= 3.6x

The increase in NOPAT along with the decrease in net operating assets from 2012 to 2013 are the factors that contribute to 2013's significantly larger RNOA.

p. 2013 RNOA using Persistent Income from j.):
797.46/1246.2= 64.0%
This RNOA is a better future profitability predictor than the RNOA in item n.) because our persistent income figure is a more accurate prediction of future net operating profit after tax.

CASE 3: STATEMENT OF CASH FLOWS

The primary purpose of the statement of cash flows is to provide relevant information about the cash receipts and payments of a company during a period. The statement of cash flows helps users evaluate a company's liquidity, solvency, and financial flexibility. On the other hand, an income statement is a measure of financial performance, specifically a company's profit or loss from revenues and expenses.

The two different methods for preparing the statement of cash flows are the direct method and the indirect method. Golden Enterprises, like most companies, uses the indirect method. We know this by examining their 2012 statement of cash flows from their 2013 Form 10-K. Golden Enterprises converts their net income from accrual to cash basis in the operating activities section of their statement of cash flows. They add back non-cash expenses that would appear on the income statement and adjust net income for changes in current assets and current liabilities. Most companies choose to prepare their statement of cash flows using the indirect method because the information required is readily available whereas the direct method requires data for items that most companies normally do not record using accrual accounting.

The three sections of the statement of cash flows are the cash effects from (1)

operating activities, (2) investing activities, and (3) financing activities during a period.

The operating activities section of the statement of cash flows is related to the balance sheet in many ways. Increases in current liabilities are subtracted from net income (decreases in CA are added), while increases in current liabilities are added to net income (decreases in CL are subtracted).

The investing activities section of the statement usually deals with property, plant, and equipment purchases and/or sales from the PPE portion of the balance sheet.

The last section of the statement of cash flows, the financing activities section, usually pulls information from the equity section of the balance sheet such as common stock issuances and treasury stock purchases.

"Cash equivalents" are liquid investments that mature in three months or less. Examples include commercial paper, marketable securities, and treasury bills.

The "apparent inconsistency" between net income being determined on an accrual basis and also appearing first on the statement of cash flows is critical to understand the process of the indirect method for preparing the statement of cash flows. The entire purpose is to convert the accrual basis net income figure to a cash basis. Therefore, net income is the first item on the statement of cash flows, but it is subsequently adjusted for non-cash expenses that are listed on the income statement, changes in current assets such as receivables, and changes in current liabilities such as accounts payable.

Analysis:

a.

Golden Enterprises Statement of Cash Flows (Indirect) For the Year Ended May 31, 2013	
Net Income	1,134,037
Adjustments to reconcile net income to net cash provided by operating activities:	
Depreciation expense	3,538,740
Deferred income taxes	(185,939)
Gain on sale of property and equipment	(61,040)
Decrease in accounts receivable, net	106,367
Decrease in inventory	200,985
Decrease in prepaid expenses	200,137
Decrease in cash surrender value of insurance	62,906
Increase in other assets	(191,298)
Decrease in accounts payable	(1,216,399)
Increase in accrued expenses	954,938
Decrease in salary continuation plan	(49,774)
Decrease in accrued income taxes	113,369
Net cash provided by operating activities	**4,607,029**
Cash flows from investing activities	
Cash received from sale of plant assets	74,514
Cash paid for purchase of plant assets	(4,149,678)
Net cash used in investing activities	**(4,075,164)**
Cash flows from financing activities	
Debt proceeds	38,361,200
Debt repayments	(38,287,529)
Change in checks outstanding in excess of bank balance	(267,502)
Purchases of treasury shares	(6,860)
Cash dividends paid	(1,467,879)
Net cash used in financing activities	**(1,668,570)**
Net decrease in cash and cash equivalents	(1,136,705)
Cash and cash equivalents at beginning of year	1,893,816
Cash and cash equivalents at end of year	**757,111**

Table 3.1 Golden Enterprises Statement of Cash Flows

Explanation of construction of the 2013 statement of cash flows on the following page.

Operating Activities:

Net cash provided from operating activities is a critical figure for users to measure how the core business aspects of a company are performing. As discussed in item b., Golden Enterprises uses the indirect method when preparing their cash flows. This requires them to adjust their net income in order to convert it to a cash basis.

As listed in order:

i. Depreciation expense is added back to net income because it is a non-cash expense listed on the income statement.

ii. The decrease in deferred income taxes is subtracted from net income.

iii. A gain on sale of a fixed asset is subtracted from net income. It is important to note here that while the actual sale of the asset was for $74,514, only $61,040 is recognized as a gain due to the net book value of the fixed asset.

iv. The next 5 items listed in the operating sections are additions or deductions due to changes in current assets and current liabilities. The fiscal year decreases in receivables, inventories, prepaid expenses, and the cash surrender value of life insurance are all added back to net income, because decreases in these accounts work positively towards generating more cash. (In other words, a decrease in accounts receivables means Golden Enterprises is collecting more cash from its sales.) The increase in other assets is

deducted from net income for the same reason as stated above.

v. The last 4 items are the adjustments due to changes in current liabilities. Increases in accrued expenses and accrued income taxes are added to net income because Golden Enterprises is not paying these liabilities off with cash as fast as they are increasing. Decreases in accounts payable and the salary continuation plan are deducted from net income. These decreases signify that Golden Enterprises is paying cash to lessen these liabilities.

Investing Activities:

The investing activities section of the statement of cash flows is the shortest and easiest to construct, in Golden Enterprises case. It is simply the $4,149,678 cash payment for purchase of new property, plant, and equipment and the sale of old equipment, which provided cash receipt of nearly $75,000.

Financing Activities:

The net cash outflow from *financing activities* includes debt issuances and debt repayments as disclosed in the additional information provided in the case packet. Purchase of treasury stock and cash dividends paid are also listed as cash outflows in the financing section of the statement of cash flows. Of particular importance, and as noted in the case packet, the item “change in checks outstanding in excess of bank balances” must also be listed in the financing section.

b**.** Depreciation expenses does not generate cash for Golden Enterprises, but it is added back to net income because it is a non-cash expense listed on the income statement. In other words, depreciation expense and amortization are expensed on the income statement, but since they do not actually require cash payments from the company, they are added back to reconcile net income to net cash provided from operating activities.

c**.** Fiscal 2013 saw a drop in Golden Enterprises ability to generate cash as well as their net income. Net income dropped nearly 49% from $2,207,623 to $1,134,037. Golden Enterprises also lost over $300,000 more in cash and cash equivalents in fiscal 2013 compared to fiscal 2012. These trends should be alarming for all of Golden Enterprises' stakeholders (especially if they are considering funding $5,000,000 worth of capital expenditures in item k.). While net sales increased in 2013, Golden Enterprise also experienced a near $3,000,000 increase in SGA expenses, which is a major contributor to their loss of income. Managers at Golden Enterprise must regain that lost income in order to bring their cash flows back to adequate operating standards.

d. Based on the statement of cash flows for 2012 and 2013, Golden Enterprises' productive capacity has seen a significant decrease over the last three years. Despite less cash lost from investing activities and only a slight increase in cash lost due to financing activities, Golden Enterprises operations saw over a $1,000,000 decrease in net cash provided. This loss of cash will harm Golden Enterprises' ability to fund projects and investments, ultimately decreasing their productive capacity. This is further evident in Golden Enterprises lost of net income in 2013 as well. There appears to be a direct

correlation between Golden Enterprises ability to generate cash and their ability to provide a net income at a consistent level.

e. Fiscal 2014 may not be the best year for Golden Enterprises to spend $5,000,000 on property, plant, and equipment. As detailed in their 2013 statement of cash flows, Golden Enterprises net cash provided from operating activities is already substantially smaller than it was in 2012. However, if Golden Enterprises deems that these capital expenditures are critical to the future operations of the company, then these purchases will be funded in large part by the cash flow from operations. Golden Enterprises covered their $4,149,678 purchase of new property, plant, and equipment in 2013 with their net cash provided from operations, but if 2014 continues to see a decline in cash provided from operating activities, Golden Enterprises might consider issuing stock to cover the entirety of the $5,000,000 capital expenditures.

CASE 4: ACCOUNTS RECEIVABLE

Accounts receivable are oral promises of the purchaser to pay for goods and services sold. Receivables are defined as claims held against customers for money, goods, or other services. They are normally collected within 30 to 60 days. Accounts receivable are often referred to as invoices, bills, or even debts.

Notes receivable are written promises to pay a certain sum of money on a specified future date, while accounts receivable are oral promises that must be collected within a certain time frame. Notes receivable can be both short-term and long-term.

A contra account is a general ledger account, which is intended to have its balance be the opposite of the normal balance for that account classification. A common contra account is accumulated depreciation, which accounts for depreciation on noncurrent assets such as equipment. Pearson's trade receivables have two contra accounts associated with them: provisions for bad and doubtful debts (contra asset) and anticipated future sales returns (contra revenue).

"Provision for bad and doubtful debts" captures the amount of accounts receivable that companies can estimate will not be collected from customers. Managers will use historical data along with knowledge of customer behavior to reasonably estimate a percentage of accounts receivable that will not be paid by customers.

"Provision for sales returns" captures the effect of Pearson's goods and services that a customer may return for any number of reasons. Managers will again use past data to anticipate a percentage of sales that companies can reasonably expect to be returned.

In the percentage-of-sales procedure for estimating uncollectible accounts receivable, otherwise known as the income statement approach, managers estimate a percentage of credit sales that will be uncollectible based on past experience and their current credit policies. For example, if a manager estimates one percent of credit sales ($100,000) are going to be uncollectible, then $1000 is predicted as bad debt expense. The journal entry is a debit to Bad Debt Expense and a credit to Allowance for Doubtful Accounts each for $1000.

The aging-of-accounts approach requires managers to set up an aging schedule, which applies a different uncollectible estimate to different age categories of accounts receivable. The aging-of-accounts procedure falls under the percentage-of-receivables approach, which produces a more accurate estimate of net accounts receivable, but it does not match cost and revenues as well as the percentage-of-sales procedure.

Pearson is taking a calculated risk by extending credit to customers that it may believe to be uncollectible. They are most likely more than willing to accept an increase in their sales revenue even if there's a chance the account is uncollectible, because managers typically want their bottom line to be impressive. However, in the long run loose credit policies can harm the future cash flows of Pearson if they are not collecting on enough accounts.

Appendix:

A. i. T-account for “Bad and doubtful debts”:

Provision for Bad and Doubtful Debts in 2009 T-Account All figures in £ millions	
	72
5	
	26
	76
20	
3	
	76

Table 4.1 Provision for Bad and Doubtful Debts T-Account

The debited line items in the Bad and Doubtful Debts account are as follows: £5 million for “exchange differences” that was gained in currency exchanges, and £20 million for accounts that were written off (or “utilised”). This amount is debited to the Bad and Doubtful Debts account and it should no longer count against Pearson’s bad debt expense, because those accounts have also been credited to accounts receivable, removing them from the books.

The credited items include £26 million for “income statement movements”, or bad debt expense that was estimated for this period. There is also a £3 million credit for new bad debt that was attained through a business acquisition.

ii. Journal Entries:

Journal Entries for the Provision for Bad and Doubtful Debts Account Activities for 2009 All figures in £ millions			
Provision for Bad and Doubtful Debts		5	
	Gain on Exchange		5
Bad and Doubtful Debt Expense		26	
	Provision for Bad and Doubtful Debts		26
Provision for Bad and Doubtful Debts		20	
	Trade Receivable		20
Loss on Business Acquisition		3	
	Provision for Bad and Doubtful Debts		3

iii. The provision for bad and doubtful debts is not directly reported on the income statement. However, “income statement movements” (bad debt expense) is reported as an operating expense.

b. i. T-account for “Provision for Sales Return”:

Provision for Sale Returns in 2009 T-Account All figures in £ millions	
	372
	425
443	
	354

Table 4.2 Provision for Sale Returns T-Account

ii. Journal Entries:

Journal Entries for the Provision for Sales Returns Account Activities for 2009 All figures in £ millions			
Sales Returns and Allowances		425	
	Provision for Sales Returns		425
Provision for Sales Returns		443	
	Trade Receivable		443

iii. The £425 million estimated sales returns appears in the “sales” line item of the income statement, which reflects the net amount Pearson expects to sale after returns.

c. i. T-account for “Total Trade Receivables”:

Gross Trade Receivables in 2009 T-Account All figures in £ millions	
1,474	
	20
	443
6,049	
	5,641
1,419	

Table 4.3 Gross Trade Receivables T-Account

ii.

Journal Entries to Record Trade Receivables Activity in 2009 All figures in £ millions			
Trade Receivable		6,049	
	Sales		6,049
Cash		5,641	
	Trade Receivable		5,641

d. Aging Schedule of Pearson's 2009 Trade Receivables:

Estimation of Total Uncollectible Accounts at December 31, 2009 All figures in £ millions			
All figures in £ millions	Balance	Estimated % Uncollectible	Accounts Estimated Uncollectible
Within due date	1096	2%	21.92
0-3 months past	228	4%	9.12
3-6 months past	51	25%	12.75
6-9 months past	20	50%	10
9-12 months past	4	60%	2.4
12+ months past	20	90%	18
Total	£1,419		74.19

Table 4.4 Estimation of Uncollectible Accounts

Based on this estimate, an auditor can be comfortable that the balance of the provision for bad and doubtful debt account reported in Note 22 (£76 million) is "adequate", although the estimates do not match exactly.

e. Average Collection Period

Average Collection Period		
	2009	2008
Credit sales, net (in £ millions)	5,624	4,811
Average gross trade receivables (in £ millions)	1,447	1,283
Account receivable turnover	3.888	3.750
Average collection period (in days)	93.878	97.338

Table 4.5 Average Collection Period

The average collection on accounts receivable decreased nearly three and a half days from 2008 to 2009. Any number of factors could have contributed to this decrease. Pearson may have enacted stricter credit policies and credit checks, or they may have stopped selling to customers that had a history of bad debt.

f. Pearson's CFO can do many things to reduce their average collection period, ultimately aligning it more closely to McGraw Hill's. Pearson can create stricter credit policies, such as shortening the payment period. Pearson can stop selling to specific customers that they know from past experience will most likely not pay their debts. Pearson can also do a better job of expediting their internal invoice/check process.

CASE 5: REVENUE AND INVENTORY RECOGNITION

GAC's new owner, Nicki, is overseeing a couple of major changes and challenges during this fiscal year. First, Nicki altered the look of GAC's graphic shirts to create an "edgier" look. However, this has made it difficult for her to maintain sales levels because the new shirts drove away GAC's conservative retail base. GAC was also forced to deal with a warehouse leak that caused about half of their plain shirts to be stained or damaged in some form. Financially, GAC made the decision to move from equity financing to debt financing, which now requires it to submit annual financial statements to its bank.

Nicki owns GAC. She was offered ownership after the original owner became seriously ill. Before Nicki took over ownership, the only external user of the financial statements was the IRS. However, now GAC is required to submit annual financial statements to its bank within 60 days of year-end.

GAC's new loan agreement with the bank includes a covenant that requires GAC to maintain a minimum current ratio of 1.0. Violation of this covenant could force GAC to be externally audited.

GAC had a couple of significant events in 2014 that could potentially affect its future operations. There is new ownership and a new financing strategy. GAC also had to deal with an inventory warehouse leak that could have caused irreparable damage to its inventory. Instead, Nicki turned this negative event into a positive by using the stained shirts to complement her new design looks.

The custom shirt business is doing well for GAC. Because of Nicki's efforts, GAC started production of $10,000 of custom shirt orders in late August. Compared to the previous year's custom orders of only $100, it is obvious GAC and Nicki have begun to capitalize on the custom shirt market for local teams and organizations.

GAC's customer base was full of conservative retailers. These retailers were not very excited about Nicki's new graphic shirt designs, and many of them cut back orders for 2014. Nicki replaced many of these customers with start-up clothing stores that were eager to offer the new designs. As mentioned above, Nicki had to work tirelessly to replace GAC's old customers with ones that were excited to sell her new designs. While she is looking forward to working with these new retailers and eager to establish her reputation as a designer with her new shirts, Nicki is worried about the management of her new customers compared to the reliability of her old customers.

It was discovered in May that the warehouse where GAC's inventory is stored had a roof leak. The damage to the building was minimal, but the water did stain over half of GAC's plain shirts. While the majority of the stains could be removed, some permanently remained. Nicki was forced to market the stained look as a "gritty" complement to her new designs, but so far it is too early to determine the final effect of the leak on sales.

Revenue Recognition:

1. The revenue recognition principle states under current GAAP rules and provisions that revenue should be recognized when it is realized/realizable and when it is earned. Revenue is realized when a company exchanges goods and services for cash or claims to cash. Revenue is earned when a company has substantially accomplished what it must to do to be entitled to the benefits represented by the revenues.

2. GAC reports its revenue from custom orders when a signed order and payment is received from a customer. This would be appropriate if GAC already had shirts ready to exchange for the customers' payments, but as it stands, this current policy is not cohesive with GAAP guidelines because GAC is receiving payment for a service it has not yet completed.

3. The alternative, as mentioned above, would be to report revenue from custom orders upon completion of the production of these orders. This is compliant with GAAP guidelines because GAC would be recognizing revenue at the point in which they have substantially accomplished enough of their service to be entitled to the benefits of the revenues.

4. GAC and Nicki should heavily consider switching their revenue recognition policy in order to comply with GAAP standards. Under GAC's current policy, because revenue is recognized at the receipt of order and payment, revenues are initially overstated and then understated throughout the remainder of the production process. This has a significant

effect on GAC's financial statements. GAC's current policy also violates the matching principle, because the revenues from the custom shirt orders are not matched in the same periods to the production expenses from these custom orders.

5. GAC began to recognize revenue using this alternative method, the effects would be noticeable immediately. Their 2014 net income would be lower because sales revenue would be significantly lower, but over the next period they will be able to recognize this "lost" revenue as GAC completes production of the shirts.

As it stands, GAC's current ratio for 2014 is 1.35, but if they quit recognizing revenue immediately upon payment, they would see an increase in their current liabilities. This increase is due to an increase in the unearned revenue account that would be credited every time GAC received cash in advance. Using GAC's financial statements, if Nicki recorded $10,000 of the custom shirt orders as unearned revenue instead of sales revenue, her current ratio would decrease to 1.11.

Receivables:

6. GAAP requires companies to report accounts receivable at their net realizable value (NRV). In other words, companies must report the amount of accounts receivable that it reasonably estimates to collect from customers.

Bad Debt:

7. Graphic Apparel uses the direct write-off method of accounting for bad debts. GAC accounts for bad debts only as uncollectible accounts are written off. This method is usually only considered appropriate when the amount being written off is immaterial.

8. In 2014, GAC lost many of its long-standing, reliable customers. Now, Nicki is selling a large amount of graphic shirts to new start-up stores. With little experience in dealing with these customers, it may be time to change GAC's method of accounting for bad debts. GAC's days to collect receivables (Accounts Receivables/ Total Credit Sales * 365 days) was 31.43 days in 2013 compared to 48.16 days in 2014. This further suggests that GAC's new customers may be less likely to pay than the long-standing customers they lost.

9. An alternative method that GAC could use for bad debts is the allowance method. This method reports accounts receivable at their net realizable value by estimating either a percentage of sales or receivables that it believes can be collected. This method is generally considered better than the direct write-off method because it states accounts receivable at their NRV and it matches revenues with expenses.

10. GAC should undoubtedly use the allowance method to report its bad debts. Reporting accounts receivable at their NRV will, over time, allow Nicki to examine the payment behavior of her new customers. It will also give her the choice to focus on an income statement approach (percentage of sales) or a balance sheet approach (percentage of receivables).

11. If GAC switches to the allowance method, they will have a bad debts expense on their income statement, reducing net income. However, this will be a more accurate representation of GAC's actual profits and accounts receivable. If Nicki used the allowance method, she could have already accounted for the $3,000 she plans to not collect. This would decrease her reported number for accounts receivable because she would instead report them at net realizable value. Her current ratio would decrease from 1.35 to 1.28 because of this decrease in current assets.

Sales Returns:

12. GAC reports sales returns in the month that goods are returned by retail customers. This method is generally acceptable only when there isn't a significant history of sales returns. Otherwise, this method reduces sales for a transaction that may have been reported in a prior period, which can distort sales and revenue values.

13. Circumstances have indeed changed for GAC in 2014. Following the inventory warehouse roof leak, Nicki and GAC have yet to seen the long-term effect of the stained shirts that they sold to retailers. In previous years, retailers sold nearly all of their shirts, but now companies may take advantage of GAC's generous refund of unsold shirts.

14. GAAP recommends that companies record a loss contingency for sales returns by reasonably estimating the amount of sales to be returned by customers.

15. Due to the water-stained shirts and new customers, GAC should consider changing to this alternative method. While it may be difficult to estimate potential returns in the first year of new customers, adoption of this method will ultimately provide a more honest representation of their financial statements. Sales returns are material to the bank because if GAC only reports a single "net sales" figure, then we are deceiving the user of a potentially higher sales number that has been reduced because of sales returns.

16. Long-term, the method of accounting for sales returns by including a contingency for sales returns is better than reducing sales in the month that customers return merchandise. This is GAAP compliant and also satisfies the matching principle.

17. This alternative method would establish an estimate for sales return and allowances and net sales would most likely be reduced on the financial statements, resulting in a loss of net income. Like the previous changes though, this is a more accurate representation of GAC's operations. Their current ratio would decrease as well because any entry made to

the sales return account would credit accounts receivable. If GAC estimates that $5,400 or 3 percent of sales every period is uncollectible, that's a decrease in accounts receivable of the same amount reducing their 2014 current ratio to 1.23.

Inventory:

18. GAAP requires inventory to be reported at the lower of cost or market.

19. GAC has been reporting its inventory at the lower of cost or market, but they have been using the weighted average cost method to determine the cost of inventory. This has been appropriate because until 2014, there was not much to distinguish individual shirts from each other.

20. The inventory warehouse leak caused a major shakeup for GAC's inventory. With a portion of the shirts now stained and easily distinguishable from undamaged shirts, it may be time for GAC to change its inventory measurement methods. The number of days to sell inventory in 2014 is a staggering 96.16 days compared to 40.56 days in 2013. This increase suggests that the water-damaged shirts may be tougher for GAC to sell to customers.

Days to sell inventory = (ending inventory ÷ cost of goods sold) x 365
2013 = (9,000 ÷ 81,000) x 365
= 40.56 days
2014 = (24,500 ÷ 93,000) x 365
= 96.16 days

21. The water stained shirts have proven difficult for retailers to sell, suggesting that GAC should consider marking down the selling price below cost. These unsold shirts are likely to be returned to GAC due to its generous return policy. GAC can cut out these returns by marking down their selling price on the damaged shirts. The gross profit percentage in 2014 is 48.32% (gross profit/net sales revenue). Nearly half of all GAC sales are resulting in profit for Nicki.

Gross profit percentage = (gross profit ÷ net sales) x 100
2013 = (89,000 ÷ 170,000) x 100
= 52.35%
2014 = (86,950 ÷ 179,950) x 100
= 48.32%

22. Assuming GAC marks down the selling price on the stained shirts below cost, GAC should now report this inventory at market value instead of cost.

23. Reporting the damaged shirts at their market value will decrease the current inventory value. Nicki noted that about half of her plain shirts were damaged in the warehouse leak. In her financial statement notes, she records ending plain shirts inventory at $10200. Assuming about half of those are damaged, that inventory value is now around $5200 and Nicki reports the stained shirts in a separate inventory group at market value. If Nicki marks the stained shirts 50% off, they are now valued at $2500. The total inventory number is now $22000 instead of the previously reported $24500. This will decrease net income because of cost of good sold will now decrease when reporting sales of the damaged shirts. The current ratio will also decrease from 1.35 to 1.29 due to the decrease of current assets (inventory).

Current Ratio Effects:

24. If GAC enacts all the proposed changes (#5, #11, #17, #23) their current ratio will fall from 1.35 to .88. This is due to a decrease in accounts receivable and inventory and a large increase in current liabilities because of the unearned revenue GAC will now recognize. This is obviously unfavorable because it violates GAC's covenant with its bank to remain at or above a current ratio of 1.0.

Adjusted current ratio = 47,800 ÷ 55,180
= .866

25. In order to return GAC to a current ratio of 1.0, Nicki needs to contribute at least $7,380 of cash to the company. This will increase current assets enough to cover the $55,180 worth of current liabilities that GAC is now reporting after enacting the proposed changes.

26. Nicki and GAC can take a few simple measures in order to benefit their operations and strengthen GAC's financial position. On top of adopting the proposed changes, I would like to see GAC revise its refund policy. Right now as the policy states, GAC offers a full refund on all graphic shirts sold to retail stores. A revision to a half-refund policy could substantially increase GAC's sales numbers. In order to collect on more accounts, GAC should also offer a discount payment period to retailers. Lastly, I recommend that GAC try to regain some of its lost customer base due to the change in design. The importance of a reliable customer base that will always pay its debts cannot be overstated, and GAC has yet to see the full effect of losing these customers in the first place.

CASE 6: DEPRECIATION AND FRAUD

a. Airlines

Depreciation has a major impact on the bottom-line of any company. However, airlines may be one of the most largely impacted as their depreciable assets (planes) cost enormous sums of money. The table below shows the values for gains on the sale of depreciated planes at two different prices.

Estimated Gain (Loss) On Sale $ in millions			
Book Value January 1, 2005	Northwest	Delta	United
Residual value	$75.00	$75.00	$75.00
Depreciable amount	$3.75	$3.75	$3.75
Useful life (in years)	$71.25	$71.25	$71.25
Annual depreciation	14.50	20.00	27.50
Accumulated Depreciation on December 31, 2008	$4.91	$3.56	$2.59
Book Value at December 31, 2008	$19.66	$14.25	$10.36
Sale Price I	$55.34	$60.75	$64.64
Gain (Loss) on Sale I	$55.00	$60.00	$65.00
Sale Price II	$0.34	$0.75	$0.36
Gain (Loss) on Sale II	$60.00	$60.00	$60.00

Table 6.1 Estimated Gain (Loss) on Sale

These three companies could have different business models that may affect their planes' useful lives in the calculation of depreciation. For example, Northwest may use a shorter useful life because it focuses on providing customers with the newest, most advanced commercial planes available. Therefore, it turns over its planes more quickly, decreasing the useful life of any individual plane as compared to Delta and United, who may be less focused on providing new planes to their customers.

Another possible explanation is that the three companies are trying to manage their earnings in different ways. Northwest may want to report lower earnings for a certain reason; therefore, they use a lower useful life in order to increase depreciation expense. United, on the other hand, may have managers that are focused on reporting high earnings, so they use a longer useful life in order to decrease depreciation.

The first set of sales prices is more realistic than the second set because each airline company sells its plane at a different price, as opposed to the second set of identical sale prices for each company. Each company depreciates its planes at a different rate, so it would be natural that each company would set different sale prices to fit its individual financial situation. This way the airliners can better manage their gains and losses on these sales.

b. Fraud

The executives in control of Waste Management, Inc. actively and knowingly participated in a massive fraud scheme that ultimately resulted in over $6 billion worth of losses. These executives falsified earnings while authorizing false and misleading financial statements to the public and investors. The motivation behind these actions was driven by a greedy desire for executives to meet the company's earnings goals in order to maintain their positions at the top of the Waste Management corporate structure. Waste

Management executives also cashed in by unloading stock to investors who were unaware of the looming stock collapse. During the active fraud period, management repeatedly made decisions to affect useful lives and salvage values of its assets in order to decrease depreciation expense. Waste Management was then able to (falsely) report an increase in earnings, while never disclosing the accounting changes to the public. Waste Management also failed to properly depreciate its landfills, which is the second largest asset category on its balance sheet. The combination of all these "errors" resulted in a massive earnings spike.

Waste Management executives most likely wanted to manage earnings for two main reasons. The first is due to pressure from shareholders and investors to meet earnings and financial goals in order to increase the value of Waste Management's stock. The second reason is much more selfish. Waste Management executives did not want to risk losing their positions and all the benefits that they were entitled to, so they falsely reported higher earnings and profits that would provide them the greatest job security.

Arthur Andersen knowingly produced unqualified audit reports on Waste Management's financial statements. The management teams from both Waste Management and Arthur Andersen entered into an agreement to write-off the accumulated errors over a ten-year period. Thus, Arthur Andersen knowingly committed to an agreement to cover up past fraud.

Arthur Andersen's settlement with the SEC required paying a $7 million fine as well as agreeing to an antifraud injunction relating to a section of the Exchange Act of 1934 that prohibits companies from engaging in manipulative or deceptive behavior. Arthur Andersen, unfortunately, did not learn much from this experience with Waste Management, as they participated in another massive fraud scheme in 2001 with Enron, an energy corporation. The consequences of the Enron scandal caused the ultimate demise of Arthur Anderson.

CASE 7: GAAP VS. IFRS

Recording Environment Liabilities at Time of Purchase (2007):

GAAP: Do not record, Construct has yet to be notified of any environmental liabilities by the EPA, so they should not record any liability at the time of the purchase. Although there was an indemnification provision in the contract of the purchase for potential environmental liabilities, these liabilities have yet to be realized, so they should not be recorded (ASC 450-20-25-2).

IFRS: Same standard.

Recording Liability for BigMix Filing for Chapter 11

GAAP: Construct should not record a liability due to BigMix filing for Chapter 11. Construct's attempt to claim some of BigMix's assets was obviously an attempt to salvage anything from BigMix (which, until bankruptcy, was contractually obliged to pay for future environmental liabilities). However, there is no accounting standard or procedure that would have Construct record a liability to recognize BigMix's inability to pay for potential future environmental liabilities.

IFRS: Same standard.

Recording Potential Environmental Liabilities in 2009

GAAP: After Construct receives the results of the third-party agency 60 percent chance of receiving $250,000 worth of penalties), they should record an environmental liability of $250,000 (ASC 410-30-25-4). The liability is both probable and estimable.

IFRS: Similar standard. The difference here is that IFRS describes the probability as "more likely than not" as opposed to 60 percent.

Recording Potential Environmental Liabilities in 2010

GAAP: Construct should record a liability for the potential environmental remediation at minimum of $400,000 in accordance with (ASC 410-30-25-15c). This amount is related to the costs of the RI/FS that the EPA has ordered Construct to undertake.

IFRS: Construct should recognize a provision for the potential environmental remediation for $400,000.

Recording Potential Environmental Remediation in 2011:

GAAP: Yes, upon completion of the RI/FS, Construct should record an additional liability for the estimated cost of the $1.5 million plan they must enact in order to cleanup the contaminated water. (ASC 410-30-25-15e)

IFRS: Same standard. Construct should record an addition $1.5 million liability.

Recording the Gain Contingency/Contingent Asset in 2012

GAAP: As stated by the FASB codification (ASC 450-30-55-14), Construct can record the probable recovery of environmental remediation costs from their lawsuit against BigMix as a contingent asset.

IFRS: International standards will not allow Construct to record the gain because realization is not certain.

CASE 8: DEBT

Rite Aid has two types of debt on its balance sheet. Secured debt requires a pledge from the borrower, usually some sort of collateral, and they generally have lower interest rates because of this. A mortgage is a great example, because the lender (most likely a bank) has the right to seize one's house if he/she defaults on his/her loan. Unsecured debt is more risky for lenders, as it is not backed by collateral; therefore they usually offer higher interest rates. An example would be the line of credit that credit card companies extend consumers. Rite Aid distinguishes between these two types of debt because it is important to know if lenders will be able to seize certain assets if Rite Aid defaults on any of its notes.

Debt is guaranteed if a third party promises to assume the debt obligation if the original borrower defaults. Rite Aid has subsidiaries guaranteeing some of its unsecured debt.

A senior bond has priority over junior bonds if liquidation occurs. In other words, senior bonds get paid back before junior bonds. Fixed-rate bonds pay the same amount of interest over the entire life of the bond. Convertible bonds can be converted into a specific number of shares of common stock.

Rite Aid has a pretty good variety of debts. This variety of debt types is likely due to the specific scenarios of each investment. Different lenders likely want different terms, values, and types of notes to meet their needs.

Appendix:

a. Total debt for Rite Aid is $6,370,899. Of this amount, $51,502 is due within the current year. Reconciliation for this amount and the amount reported on Rite Aid's balance sheet is calculated as follows:

Total Debt Reported in Note 11	**6,370,899**	
Long-term debt (balance sheet)		6,185,633
Lease financing obligations (balance sheet)		133,764
Current maturities (balance sheet)		51,502
		6,370,899

b. The 7.5% senior secured notes due March 2017:

1. The face value (i.e. the principal) of the note is $500,000 (The NBV of note does not change from year-to-year, so it must be issued at par.)

2.

Journal Entry for Note Issuance			
Cash		500,000	
	Bonds Payable		500,000

3.

Journal Entry for Interest Expense			
Interest Expense		37,500	
	Cash		37,500

4.

Journal Entry for Note Maturance			
Bonds Payable		500,000	
	Cash		500,000

c. The 9.375% senior notes due December 2015. (Assume interest is paid annually.):

1. The face value is $410,000. The carrying value is $405,951. These numbers differ because the carrying value reflects the amount of unamortized discount on the note.

2. Rite Aid paid cash interest of $38,437.50 on these notes during fiscal 2009.

3. Total interest expense on these notes for the year ended February 27, 2010:

Cash	38,437.50
Discount	705.00
Interest Expense	**39,142.50**

4. Journal entry to record interest expense on these notes for fiscal 2009:

Journal Entry to Record Interest Expense			
Interest Expense		39,142.50	
	Discounts on Bonds Payable		705.00
	Cash		38,437.50

5. Total interest rate recorded for fiscal 2009 on these notes:

$39,142.50 / $405,246 = **9.66%**
(Total interest expense / carrying value of note at beginning of the year)

d. Consider the 9.375% notes due June 2016.

1.

Journal Entry to Record Issuance			
Cash		402,620	
Discount on Bonds Payable		7,380	
	Bonds Payable		410,000

2. Effective annual rate of interest = $40, 749.98/402,620
= 10.1212%

3. February 27, 2010 journal entry:

Interest Expense		$ 27,166.67	
	Discount on Bonds Payable		$ 516.67
	Interest Payable		$ 26,650.00

5. Net book value of the notes at February 27, 2010:

Original book value ($402,620) + Discount ($516.67) = NBV (**$403,136.67**)

6. Straight-line amortization schedule

Rite Aid **Amortization Schedule - Effective Interest**					
Date	Interest Payment	Interest Expense	Bond Discount Amortization	Net Book Value of Debt	Effective Interest Rate
6/30/09	-	-	-	$402,620	10%
6/30/10	$39,975	$40,750	$775	$403,395	10%
6/30/11	$39,975	$40,828	$853	$404,248	10%
6/30/12	$39,975	$40,915	$940	$405,188	10%
6/30/13	$39,975	$41,010	$1,035	$406,223	10%
6/30/14	$39,975	$41,115	$1,140	$407,363	10%
6/30/15	$39,975	$41,230	$1,255	$408,618	10%
6/30/16	$39,975	$41,357	$1,382	$410,000	10%

Table 8.1 Rite Aid Amortization Schedule

7. Year-by-year interest expense comparison:

Rite Aid Interest Expense Comparison			
Date	**Effective Interest Method**	**Straight-Line Method**	**Difference**
6/30/2009	$ -	$ -	
6/30/2010	$ 40,750.00	$ 41,136.80	$ 386.80
6/30/2011	$ 40,828.44	$ 41,136.80	$ 308.36
6/30/2012	$ 40,914.82	$ 41,136.80	$ 221.98
6/30/2013	$ 41,009.94	$ 41,136.80	$ 126.86
6/30/2014	$ 41,114.69	$ 41,136.80	$ 22.11
6/30/2015	$ 41,230.04	$ 41,136.80	$ 93.24
6/30/2016	$ 41,357.07	$ 41,136.80	$ 220.27
Total:	**$ 287,205.00**	**$ 287,957.60**	$ 752.60

Table 8.2 Rite Aid Amortization Interest Expense Comparison

The effective interest method saves Rite Aid more than $750,000 over the life of the note in interest expenses. The payments for the first three years of the effective interest method are much more attractive than the straight-line payments.

e. Suppose Rite Aid repurchases the 9.5% senior notes due June 2017 during year fiscal 2010. Assume Rite Aid paid $797,769 to repurchase the notes, resulting in a gain of $3,750.

1. Prepare the journal entry to record the repurchase.

Journal Entry to Record the Repurchase			
Notes Payable		810,000	
	Cash		797,769
	Discount on Notes Payable		8,481
	Gain on Repurchase		3,750

2. These are callable bonds; therefore Rite Aid is allowed to repurchase them at any point. Because they were repurchased before maturity, Rite Aid is able to avoid paying $3,750 of discount on the bonds, and can repurchase them below face value.

3. The market rate is lower than the 9.5% coupon rate and the effective rate, thus Rite Aid is able to repurchase these notes and recognize a gain.

f. Firms issue convertible notes because they allow companies to take on debt without harming their operating income. Convertible bonds are attractive for investors, because, at a lower risk, they can purchase bonds with the plans of converting them into stock options if the company does well. Rite Aid's balance sheet would experience a decrease in liabilities if the bonds were converted to stock. This new stock and any additional PIC would increase the equity section of the balance sheet.

g. Leverage/Solvency:

1. Ratio table:

Rite Aid Ratio Table				
Ratio	***Definition***	***Industry Average***	***Rite Aid FY2009***	***Rite Aid FY2008***
Common-size debt	Total liabilites/ Total assets	43.83%	120.79%	114.41%
Common-size interest expense	Interest expense/ Net sales	0.35%	2.01%	1.82%
Debt to assets	Total long-term debt/ Total Assets	14.41%	78.50%	72.20%
Long-term debt to equity	Total long-term debt/ Total shareholders' equity	0.26x	3.81	4.98
Proportion of long-term debt due in one year	Long-term debt due in one year/ Total long-term debt	6.11%	0.81%	0.68%
Times-interest-earned (interest coverage)	(Pretax income + interest expense)/ Interest expense	33.44x	0.07	-4.41

Table 8.3 Rite Aid Ratio Table

2. Rite Aid is struggling mightily to keep up with industry standards in virtually every category.

3. I would be very concerned about Rite Aid's ability to meet its long-term commitments, because they simply do not have the cash flow or the assets available to pay off these loans. They are drowning in different types of debt, and they have yet to turn these investments into any form of profit.

h. Due to the enormous burden that Rite Aid will experience in the future as it begins to pay off its massive amount of debt, I would give Rite Aid a Standard and Poor's credit rating of CCC. There is no reason to believe that has even the capacity to meet its current financial commitments. The operations have just not cut it for this company, and instead of focusing on improving these operations, Rite Aid chose to engulf itself in debt.

CASE 9: STOCKHOLDERS' EQUITY

a. Merck's common shares:

i. Merck is authorized to issue 5,400,000,000 shares of common stock.

ii. At December 31, 2007, Merck has issued 2,983,508,675 shares of common stock.

iii. Reconcile the number of shares issued at December 31, 2007, to the dollar value of common stock reported on the balance sheet:

2,983,508,675 x $.01 = $29.8 million

iv. 811,005,791 shares of common stock are held in treasury at December 31, 2007.

v. 2,172,502,884 shares of common stock are outstanding at December 31, 2007. (Shares issued – shares held in treasury)

vi. Total market capitalization of Merck on December 31, 2007:

2,172,502,884 x $57.61 = $125,157,900,000

b. GlaxoSmithKline's ordinary shares:

i. GlaxoSmithKline is authorized to issue 10,000,000,000 ordinary shares.

ii. GlaxoSmithKline has issued 6,012,587,026 ordinary shares.

iii. 5,373,862,962 ordinary shares are in free issue.

iv. 504,194,158 common shares are held in treasury.

v. "Share capital" is the amount of shares issued at their par value, and "share premium account" is the amount paid for the shares above their par value. On Merck's, U.S. GAAP balance sheet, these accounts are likely listed as "Common stock" and "Paid-in capital in excess of par".

c. Companies pay dividends to reward stockholders for owning shares of the company. Dividends are a good way for companies to affirm their financial well-being. Normally, stock prices drop when dividends are declared and paid, because the company must use its own assets to pay cash dividends, therefore decreasing the value of the company.

d. Usually, companies repurchase their own shares to take advantage of its own undervalued stock price, and to make their stock look more attractive to investors by reducing the number of shares outstanding in the market (thereby increasing their earnings per share ratio).

e. Merck's common dividend activity for 2007:

Journal Entry for Dividend Activity			
Dividends declared		3,310,700,000	
	Cash		3,307,300,000
	Dividends payable		3,400,000

f. GlaxoSmithKline ordinary dividends:

i. 2007 Journal Entry:

Journal Entry for Dividend Activity			
Dividends declared		2,793,000,000	
	Cash		$ 2,793,000,000

ii. Reconciliation of dividends declared with amount reported in statement of cash flows:

2007- First interim	670,000,000
2007- Second interim	667,000,000
2006- Fourth interim	785,000,000
2006- Third interim	671,000,000
SCF recorded amount	**2,793,000,000**

g. Merck's treasury shares:

i. Merck uses the cost method to account for its treasury stock transactions. Under the cost method, the purchase of treasury stock is recorded by debiting treasury stock account by the actual cost of purchase. The cost method ignores the par value of the shares and the amount received from investors when the shares were originally issued.

ii. Merck repurchased 26,500,000 shares on the open market.

iii. Merck paid $1,429,700,000 in total to buy back these shares ($53.95 per share). This represents a cash flow from financing activities.

iv. Treasury stock is not disclosed as an asset because it represents a reduction in stockholders' equity. Treasury stock does not promise a future economic benefit like other assets.

h. GlaxoSmithKline's treasury shares:

i. GlaxoSmithKline repurchased 285,034,000 shares in 2007. 269 million of those shares are held in treasury and the rest have been cancelled.

ii. The company paid $13.16, on average, for each share.

(Total cost of repurchased shares / total number of shares repurchased)

iii. Note 34 "Movements in equity" is comparable to "Statement of Stockholder's Equity" under U.S. GAAP.

Journal Entry for Repurchase			
Retained Earnings		3,750,000,000	
	Cash		3,750,000,000

Under U.S. GAAP, a debit is made to the treasury stock account and a credit to cash.

i. Comparison:

Merck & GlaxoSmithKline Equity Comparison			
	Merck		Glaxo
(in millions)	2007	2006	2007
Dividends paid	3,307.30	3,322.60	2,793.00
Shares outstanding	2,172.50	2,167.79	5,373.90
Net income	3,275.40	4,433.80	6,134.00
Total assets	48,350.70	44,569.80	31,003.00
Operating cash flows	6,999.20	6,765.20	6,161.00
Year-end stock price	57.61	41.94	97.39
Dividends per share	1.52	1.53	0.52
Dividend yield	2.64%	3.65%	0.53%
Dividend payout	1.01	0.75	0.46
Dividends to total assets	0.07	0.07	0.09
Dividends to operating cash flows	0.47	0.49	0.45

Table 9.1 Merck & GlaxoSmithKline Equity Comparison

Merck's dividend-related ratios from 2006 to 2007 change slightly. The yield decreases as a result of the increase in stock price. The payout ratio increases as well and now Merck is paying out more in dividends than the income they are earning. Between the two companies, Merck has a more impressive dividend yield and a much higher payout ratio. The dividends to assets/operating cash flows ratios are about the same for both companies.

CASE 10: SECURITIES

a. Trading securities are debt and equity investments that are purchased with the intent of selling them within a short period of time in order to make a profit.

i. How would a company record $1 of dividends or interest received from trading securities?

Dividend receivable		$1	
	Dividend income		$1
Cash		$1	
	Dividend receivable		$1

ii. If the market value of trading securities increased by $1 during the reporting period, what journal entry would the company record?

Trading account assets		$1	
	Unrealized holding gain - income		$1

b. Securities available-for-sale are investments that are purchased with the intent of selling before it reaches maturity, although they are not intended to be sold as quickly as trading securities.

i. How would a company record $1 of dividends or interest received from securities available for-sale?

Dividend receivable		$1	
	Dividend income		$1
Cash		$1	
	Dividend receivable		$1

ii. If the market value of securities available-for-sale increased by $1 during the reporting period, what journal entry would the company record?

Investment securities AFS		$1	
	Unrealized holding gain - equity		$1

c. Securities held-to-maturity are securities that are purchased with the intention of holding the investment to maturity.

i. If the market value of securities held-to-maturity increased by $1 during the reporting period, what journal entry would the company record?

ii. No entry would be made because securities held-to-maturity are reported at amortized cost.

d. Trading account assets:

1. What is the balance in this account on December 31, 2012? What is the market value of these securities on that date?

$637,000,000

Market value = $637,000,000

2. What adjusting journal entry would State Street make to adjust this account to market value? (Assume that the 2012 unadjusted trial balance for trading account assets was $552 million. Ignore any income tax effects.)

Trading account assets		$85,000,000	
	Unrealized holding gain- income		$85,000,000

e. Investment securities held to maturity:

1. What is the 2012 year-end balance in this account?

$11,379,000,000.

2. What is the market value of State Street's investment securities held to maturity?

$11,661,000,000.

3. What is the amortized cost of these securities? What does “amortized cost” represent? How does amortized cost compare to the original cost of the securities?

The amortized cost of these securities is $11,379,000,000. This represents the acquisition cost adjusted for the amortization of discount or premium. Depending on the market and face rates for each individual security, the amortized cost can be more than or less than the original cost.

4. What does the difference between the market value and the amortized cost represent? What does the difference suggest about how the average market rate of interest on held-to-maturity securities has changed since the purchase of the securities held by State Street?

The difference between the market value and the amortized cost of these securities represents the unrealized gains and losses on these securities during the year. Because the market value is greater than the amortized cost, it is fair to assume that the average market rate of interest on HTM securities has increased since the purchase of these securities.

f. Investment securities available for sale:

1. What is the 2012 year-end balance in this account? What does the balance represent?

$109,682,000,000. This represents the fair (market) value of the securities.

2. What is the amount of net unrealized gains or losses on the available-for-sale securities held by State Street at December 31, 2012?

$1,919,000,000 net unrealized gain.

3. What was the amount of net realized gains or losses from sales of available-for-sale securities for 2012? How would this amount impact State Street's statements of income and cash flows for 2012?

$55,000,000 gain. This amount appears on the income statement as well as the statement of cash flows in the investing section as an addition to the cash flow provided.

g. Investing Activities:

1. Journal entry to record the purchase of available-for-sale securities for 2012:

Investment securities AFS		$60,812,000,000	
	Cash		$60,812,000,000

2. Journal entry to record the sale of available-for-sale securities for 2012:

Cash		$5,399,000,000	
Gain on sale			$55,000,000
	Investment securities AFS		$5,344,000,000

3. Original cost of the available-for-sale securities sold during 2012:

$5,344,000,000
-$67,000,000
$5,277,000,000

4. What is the amount of net unrealized gains or losses during 2012 for the available-for-sale securities on hand at December 31, 2012? Show the journal entry that State Street would have made to mark the available-for-sale securities portfolio to market value at year-end. How would this amount impact State Street's statement of cash flows for 2012?

Net URG	
$181,000,000	
$67,000,000	
	$1,367,000,000
	$1,119,000,000

Investment securities AFS		$67,000,000	
	Unrealized holding gain		$67,000,000

In the statement of cash flows, this unrealized holding gain would be subtracted in the operating section.

CASE 11: REVENUE GROWTH AND REGULATORY ISSUES

Groupon shares many similar business traits with Amazon and Wal-Mart. They are all retailers with a large focus on their online sales (with a slight exception for Wal-Mart, which still dominates in store sales). Groupon offers discounts in the form of vouchers for goods and services from other companies. In other words, they act as a sort of sales agent for companies by providing discounts to customers. Amazon and Wal-Mart, on the other hand, are more traditional in the sense that they distribute and sell goods themselves. Amazon is more closely comparable to Groupon though, because Amazon holds goods from many suppliers, while Wal-Mart owns and supplies its own goods.

All three of these companies jumped on the opportunity that was made available with the Internet age. Each provides customers with a streamlined online shopping experience. Groupon seems to expose itself to more risks than the other two, largely due to the fact that they are not selling goods/services but rather providing discounts. This translates into financial reporting risks related to both revenue recognition and accounting for allowances. Amazon is exposed to some of these risks as they allow other retailers to sell goods on their site. Wal-Mart, however, is much more secure in the terms of its revenue recognition and accounting for allowances because they are the sole supplier.

In order to get a better picture at what life is like for a young company, let's look at Amazon's revenue, income, and stock price growth:

Amazon			
Revenue, Income, and Stock Price 1997-2010			
Year	Net Sales	Net Income	Stock Price
1997	$147,787	$31,020	$5.02
1998	$609,996	$124,546	$53.54
1999	$1,639,839	$719,968	$76.13
2000	$2,761,983	$1,411,273	$15.56
2001	$3,122,433	$567,277	$10.82
2002	$3,932,936	$149,132	$18.89
2003	$5,263,699	$35,282	$52.62
2004	$6,921,000	$588,000	$44.29
2005	$8,490,000	$359,000	$47.15
2006	$10,711,000	$190,000	$39.46
2007	$14,835,000	$476,000	$92.64
2008	$19,166,000	$645,000	$51.28
2009	$24,509,000	$902,000	$134.52
2010	$34,204,000	$1,152,000	$180.00

Table 11.1 Amazon Revenue, Income, and Stock Price Comparison

While the statement in question is difficult to support on a strict black/white basis, it is apparent that revenue growth is a large driving factor behind the increase of Amazon's stock price. For a young company, focus on revenue in the early years can allow for better bottom line success down the road, which is exactly what Amazon experienced. Young businesses, like Amazon and Groupon, must first prove they are viable companies by showing investors they are able to raise large amounts of revenues from their business models. As the companies age, the focus shifts from revenue growth to net income.

Appendix

a. Gross Margin Percentage:

The gross margin percentage for Groupon is much higher under the net method due to the much lower cost of goods sold recognized under this method.

b. Asset Turnover Ratio:

Groupon's asset turnover ratio also varies with their selected method of accounting. Under the gross method, a higher asset turnover is recorded both years due to the higher amount of revenue recognized as compared to the net method. It is also important, and encouraging, to note Groupon increases its total asset turnover from 2009 to 2010 even though their 2010 total assets increased over 25x the amount from 2009.

Groupon **Common Size Income Statements for 2009 and 2010**				
	2009		2010	
	Gross	Net	Gross	Net
Income Statement Account				
Revenue	100%	100%	100%	100%
Cost of Sales	64.14%	30.34%	60.75%	10.39%
Gross Margin	35.86%	69.66%	39.25%	89.61%
Marketing Expense	15.13%	33.79%	36.89%	90.86%
General and Admin. Expense	24.67%	44.14%	32.79%	68.17%
Other Expenses	0.00%	0.00%	28.48%	64.94%
Net Loss	4.41%	7.52%	57.95%	134.26%
Gross Margin Percentage	35.86%	69.66%	39.25%	89.61%
Asset Turnover Ratio	203.18%	96.91%	359.82%	157.82%

Table 11.2 Groupon Common Size Income Statement Comparison

c. In the months leading up to Groupon's IPO, the SEC posed a number of questions regarding Groupon's choice of accounting principles for revenue recognition. Specifically, the SEC referred to the requirements in FASB's ASC 605-45-45.

i. The difference in reported revenues is due to the change in accounting methods. Under the gross method Groupon recognized the entire amount of cash received from its customers as revenue. However, under the net method, Groupon is only allowed to recognize the difference in cash received and cash paid to their suppliers as revenue.

ii. Groupon most likely preferred the gross method of reporting revenue, as it allowed them to greatly inflate their revenue numbers. As stated in the case, these amazingly high revenue numbers were the driving force for Groupon's early success, so management would obviously prefer this method.

iii. Groupon justified its use of the gross method by stressing to the SEC that they were the primary obligors in Groupon's arrangements. They argued that the specific Groupon vouchers, which Groupon supplies, were enough to be considered a good or service in itself, as opposed to the actual goods and services the vouchers are for.

iv . Groupon's entire argument to the SEC is easily described as weak. Specifically, the fact they would consider themselves the primary obligor in an arrangement in which Groupon does not even deliver the final goods and/or services is ludicrous. Furthermore, they tried to argue that they bear the credit and inventory risk,

which is laughable considering Groupon's inventory consists not of the goods and services they offer discounts on, but rather little sheets of paper providing discounts for goods and services from other companies. Groupon is obviously acting as an agent for its merchants, and the SEC quickly saw through their argument.

d. Right of return

Companies are required to establish an allowance for returns when right of return exists and is material. This presents some tricky accounting issues for Groupon because the "Groupon Promise" allows for returns if customers are unsatisfied backs their entire business model, the same business model that does not have Groupon actually delivering goods to customers. Therefore, Groupon is promising returns on goods it does not even own, which is quite sticky to think about accounting wise. Also, because Groupon has no historical data to support returns, they should be accounting for their revenue as unearned until the right of return expires.

Of course we do not agree with Groupon's accounting. Their unconditional promise and lack of historical data makes it impossible for them to estimate the amount of returns. Furthermore, as they delved into more high-ticket items, they failed to foresee the high rate of returns they experienced, which in turn forced them to restate their fourth quarter financials.

Groupon should have limited its (in)famous Groupon Promise to a certain time frame (a month, for example), therefore allowing them to estimate their returns more accurately.

Operating cash flow was unaffected because Groupon recognized an increase in operating expenses for this period due to the revision, which is added back to net income when calculating OCF. It is also likely that Groupon used some nifty accounting tricks in regard to its working capital (accounts receivables and payables) to show no change in its OCF.

CASE 12: TAX LIABILITIES

Book income is another term for pretax financial income, or income before taxes. It is the number reported on financial statements according to GAAP. ZAGG's 2012 book income is $23.898 million. A company's book income is different from its taxable income because book income is determined according to GAAP and taxable income is reported using the Internal Revenue Code, which allows for some alternative reporting methods when determining revenues and expenses.

Permanent tax differences are items that enter into the determination of financial income but will never enter into the determination of taxable income (or vice versa). An example would be a fine imposed by the EPA for pollution. The fine would be deducted from financial income but not taxable income.

Temporary tax differences arise when an income or expense item is recognized on the income statement in one year and on the tax return in another year. An example of this would be the accrual of legal fees, which would be recognized in financial income as they accrue, but would only be deductible from taxable income when the litigation is settled.

Statutory tax rate is the tax rate legally required by a governing entity. Usually, there are different tax rates for individuals with different income levels, as well as statutory rates for corporations.

Effective tax rate is the average tax rate an individual or corporation is taxed at (taxes paid divided by book income). As proven later in this case, the effective tax rate is often different than the statutory tax rate.

Companies report deferred income taxes as part of their total income tax expense because to not do so would mislead users of the financial statements to believe that a company's total tax expense is significantly lower (or higher) than it actually is. For example, a deferred tax liability that originates in 2014, although not payable immediately in 2014, is still representative of the total tax expense experienced by a company in that year.

A deferred tax asset (DTA) represents the increase in taxes saved in future years as a result of deductible temporary differences at the end of the current year. A DTA could occur when a company accrues a loss for pending litigation (as mentioned earlier). For tax purposes, the loss is not recognized until paid, so a company would recognize this temporary difference as a deferred tax asset.

A deferred tax liability (DTL) represents the increase in taxes payable in future years as the result of temporary differences existing at the end of the current year. A common situation that gives rise to a DTL is the use of different depreciation techniques used for book and tax purposes. Often the preparers of tax returns use accelerated depreciation, which creates a temporary difference in taxable income because financial reporting is usually done with the straight-line method. The difference between the two depreciation amounts represents a deferred tax liability that the company will pay for over the coming years.

If it is more likely than not that some portion or all of the deferred tax asset will not be realized, than the deferred tax asset should be reduced by a valuation allowance, which is a contra asset account to the DTA.

Appendix:

a. Income Taxes

i. Show the journal entry that ZAGG recorded for the income tax provision in fiscal 2012.

Journal Entry for Income Tax Provision $ in thousands			
Income tax provision		9,393	
Net deferred tax asset		8,293	
	Income tax payable		17,686

ii. Decompose the amount of "net deferred income taxes" recorded in income tax journal entry in part i into its deferred income tax asset and deferred income tax liability components.

The net deferred tax asset was recorded at $8,293. This amount is composed of an increase in deferred tax assets from 2011 to 2012 in the amount of $8,002 and a decrease in deferred tax liabilities of $291. These amounts are reported in ZAGG's tax breakdown in Note 8.

iii. ZAGG's 2012 effective rate is calculated simply as their income tax provision divided by their income before taxes: 9393/23898 = 39.30%. As detailed in Note 8, this difference is due to non-deductible expenses as well as

adjustments and valuation account changes that are not factored in to the statutory rate amount.

iv. ZAGG had a net deferred income tax asset balance of $13.508 million. This amount (also handedly broken down in Note 8) is separated into current and noncurrent portions on the balance sheet. $6.912 million is classified as current assets, and the remaining $6.596 million is classified as noncurrent assets.

b. Note 8 (statutory rate=35%, blended state statutory=3%)

i. As of December 31, 2012, which system recognized a greater expense over time relating to depreciation- book or tax? Describe what information you used to make this assessment.

The tax system recognized a greater depreciation expense over time. One can infer this by recognizing that, because there is a property and equipment deferred tax liability, the tax system expense must be greater than the book expense, therefore creating the DTL.

ii. Estimate the dollar magnitude of the cumulative difference in depreciation between the two systems as of December 31, 2012.

$2,089,473.68 = $794,000/38%

or

$794,000 = $2,089,473.68*38%

iii. Using the information in the chart above, determine the balance in “Property and equipment, net” on the balance sheet at December 31, 2012 if tax depreciation had been used throughout the assets’ lives instead of the reported method.

If tax depreciation had been used, the balance in “Property and equipment, net” should be $2.773 million. This number is reached by subtracting the cumulative difference in (ii) from the amount currently reported on ZAGG’s balance sheet for “Property and equipment, net”.

c. Allowance for doubtful accounts:

i. The book system recognized a greater expense for doubtful accounts in 2012. This can be determined by comparing the increase in the allowance account on the balance sheet ($904 thousand) and the increase in the allowance account in the tax breakdown in Note 8 ($229 thousand).

ii. Estimate the dollar magnitude of the difference in bad debt expense between the book and tax system for the year ended December 31, 2012.

$602,632 = $229,000/38%
or
$229,000 = $602,632*38%

d. Deferred Tax Valuation Allowance

The amount of the deferred income tax asset valuation allowance at December 31, 2013 is $713 thousand. This $713 thousand is related to a deferred tax asset generated by losses on an equity investment in a startup company. ZAGG's management does not have much faith in the operations and management of the startup, so they determined that the deferred tax asset will most likely not be realizable, and created a full valuation allowance for the entire deferred tax asset amount.

e. If the IRS changes the federal statutory tax rate from 35% to 30% on January 1, 2013, ZAGG must re-value their DTAs, which is calculated as follows (in thousands):

13,508
/38%
35,547
x 33%
11,731

This subsequent journal entry is made to record the differences in the old and new DTA amounts (in thousands):

Income tax provision		1,777	
	Net deferred tax assets		1,777

CASE 13: PENSIONS AND RETIREMENT PLANS

The two main types of retirement plans are defined benefit plans and defined contribution plans. Defined contribution plans are simpler accounting wise. The employer makes an annual contribution to a fund at the end of each year based on a formula. The liability lies with the employee in fulfilling his or her service obligations. An example of a defined contribution plan is a 401k. A defined benefits plan is trickier. The employer is obligated to provide a certain benefit at the time of retirement based on years of service and compensation in the years approaching retirement. The accounting is trickier because the benefits are defined in terms of uncertain future variables. Johnson & Johnson has both types of these plans.

Retirement plan obligations are liabilities because they represent a deferred compensation obligation that a company is legally required to pay in the future, upon its employees' retirements.

In order to account for retirement plan obligations employers must make assumptions about changes in interest rates over time, increases or decreases in employee salaries over time, and inflation or deflation amongst other items.

Four major activities influence pensions' obligations throughout the year. Service costs increase the pension obligation because the company is recording the services rendered by employees for the year under the terms of the pension plan. Interest cost also increases the pension obligation. Interest accrues each year based on the settlement rate determined by the company. Actuarial gains and losses decrease and increase the pension obligation respectively. These gains or losses are recognized when the plan must be revalued for any number of reasons, including salary increases or changes in settlement rates and return rates. Benefits paid to retirees decrease the pension obligation because, upon payment, the company is no longer liable for that amount due to retirees under the terms of the plan.

Actual return increases the value of plan assets (assuming it is positive). This return can include dividends received, interest payments received, and market gains on the pension plan's investments. Contributions by the company to the plan also increase the value of plan assets, simply because the company is directly contributing cash to the fund. Benefits paid to retirees decrease the value of the plan assets because the payments are made from the plan fund.

Actual return on plan assets are subject to market fluctuations throughout the year, so a "smoothing" technique was adopted to have pension expense affected by expected return, which is the fair value of the plan assets multiplied by an expected rate of return. The difference in the two return values will be either added to pension expense (actual>expected) or subtracted (expected>actual). Expected returns are not subject to this fluctuation.

The primary differences between Johnson & Johnson's other-benefits plan and its retirement plan is that the other-benefits plans provide a service to employees during their years of service (health and dental, for example). The retirement plan provides benefits to retirees after their years of service.

Appendix

Pension expense:

i. Johnson & Johnson reported $646 million in pension expense on its 2007 income statement.

ii. Journal entry to record service cost and interest cost portion of the 2007 pension expense:

Journal Entries Service Cost and Interest Cost Account Activities for 2007 $ in millions			
Pension Expense		597	
	Projected Benefit Obligation (PBO)		597
Pension Expense		656	
	Projected Benefit Obligation		656

Retirement plan obligation:

i. The value of the company's retirement plan obligation at December 31, 2007 is $12,002 million. This value represents the deferred compensation obligation that Johnson & Johnson has to its employees for their service under the terms of this pension plan. While it is safe to say this number is accurate, reliable is a tricky descriptor to use. It is reliable in the since that the number accurately represents the present value of vested and nonvested benefits accrued to date, but it is unreliable in the since that the value of the PBO is more than likely to change over the next year due to divestures, curtailments, benefits paid and other factors listed in the table on page 62 of the company's annual report.

ii. The pension-relate interest cost is 5.63 percent. Calculated as follows

= Pension related interest costs (656 million)/ PBO - BoY (11.660 million)

This rate seems reasonable, as it is not vastly different from the discount rate of 6.5 percent.

iii. $481 million of pension benefits were paid to retirees during 2007. Johnson & Johnson does not directly pay cash to these retirees, but rather the benefits are pulled from the pension trust fund. Therefore, the payment of these benefits decreases both plan assets and the value of PBO.

Retirement plan assets:

i. The value of the retirement plan assets at December 31, 2007 was $10,469 million. This represents the total value of the investments in the pension trust fund that will be used to pay benefits to retirees as they come due. (Further breakdown of the investments found in part (iv).)

ii.

Johnson & Johnson Expected & Actual Return Comparison for the Years Ended December 31, 2007 and 2006		
	2007	2006
Plan assets-beginning of year	9,538,000,000	8,108,000,000
Expected return rate	9%	9%
Expected return	858,420,000	729,720,000
Actual return	743,000,000	966,000,000
Difference	115,420,000	(236,280,000)

Table 13.1 Johnson & Johnson Return Comparison

The expected return is likely a better reflector of the company's pension expense because it will "smooth" the annual fluctuations on the plan's actual return.

iii.

Johnson & Johnson Contributions Comparison for the Years Ended December 31, 2007 and 2006		
	2007	2006
Company contributions	317,000,000	259,000,000
Employee contributions	62,000,000	47,000,000
Total contributions	379,000,000	306,000,000
Increase from 2006 to 2007	73,000,000	

Table 13.2 Johnson & Johnson Contributions Comparison

iv. Johnson & Johnson's U.S. retirement plan is composed of 79 percent of equity securities and 21 percent of debt securities. Their international plan is composed of 67 percent equity securities, 32 percent debt securities, and 1 percent of real estate and other investments.

i. The funded status and the breakdown of where the status appears on the balance sheet is as follows:

Johnson & Johnson Pension Obligation Benefit Comparison for the Years Ended December 31, 2007 and 2006		
	2007	2006
PBO	12,002,000,000	11,660,000,000
Fair value of plan assets	10,469,000,000	9,538,000,000
Underfunded amount	1,533,000,000	2,122,000,000
	Balance sheet breakdown	
Non-current assets	481,000,000	259,000,000
Current liabilities	(43,000,000)	(26,000,000)
Non-current liabilities	(1,971,000,000)	(2,355,000,000)
Total	(1,533,000,000)	(2,122,000,000)

Table 13.3 Johnson & Johnson Pension Obligation Benefit Comparison